

What is claimed is:

1. A carding machine having a carding cylinder and at least a first cooperating device in cooperating  
5 relationship with the carding cylinder, comprising an adjusting device for setting a working gap between the carding cylinder and said first cooperating device, the adjusting device comprising a thermal device for adjusting the temperature of a support member of the cylinder.

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2. A carding machine according to claim 1, in which the first cooperating device is a clothed roller.

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3. A carding machine according to claim 1, in which the clothed roller is a doffer.

4. A carding machine according to claim 3, further comprising a second cooperating device, said second cooperating device being a licker-in.

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5. A carding machine according to claim 1, in which the thermal device is so arranged that the temperature of the support member can be so matched to the working gap that, in the event of a change in the dimensions of the cylinder  
25 the working gap can be set or readjusted.

6. A carding machine according to claim 1, in which the support member comprises a framework wall and the thermal device comprises a heating device arranged for heating at least one element of the framework wall.

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7. A carding machine according to claim 6, in which the framework wall includes a heating element.

8. A carding machine according to claim 1, in which  
10 there is at least one heating element on each side of the carding machine.

9. A carding machine according to claim 8, in which the temperature of the or each heating element is adjustable.

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10. A carding machine according to claim 1, having at least one framework wall that has at least two support struts on each side and a crossmember, and in which the support struts are expandable or contractable in the  
20 vertical direction.

11. A carding machine according to claim 1, in which the cylinder and at least one neighbouring roller are arranged on their own respective framework walls or struts.

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12. A carding machine according to claim 11, in which the

cylinder is arranged on a framework that is higher than a framework of at least one neighbouring roller and the thermal device comprises at least one heating element arranged in the region of the cylinder framework that projects above the framework of a neighbouring roller.

13. A carding machine according to claim 1, in which the temperature to be set for achieving a desired adjustment of the working gap is determinable in accordance with the relationship:  $\Delta a = R \times \alpha \times \Delta T$ .

14. A carding machine according to claim 1, comprising at least one temperature-measuring element associated with the cylinder.

15. A carding machine according to claim 1, comprising a doffer in cooperating relationship with the cylinder, and at least one temperature-measuring element associated with the doffer.

16. A carding machine according to any one of claims 1 to 15, comprising a licker-in in cooperating relationship with the cylinder and at least one temperature-measuring element.

17. A carding machine according to claim 1, in which

there are temperature-measuring elements associated with the surfaces of one or more rollers.

18. A carding machine according to claim 1, comprising an  
5 electronic control and regulating device to which the thermal device and at least one temperature-measuring element are connected.

19. A carding machine according to any one of claims 1 to  
10 18, comprising a gap-measuring element for determining the gap between two neighbouring rollers.

20. A carding machine having a carding cylinder and at least one clothed roller in cooperation with the cylinder,  
15 and further comprising an adjusting device for setting a working gap between the cylinder and said clothed roller, the adjusting device comprising a thermal device for adjusting the temperature of a support member that carries the cylinder for carrying thermal expansion or contraction  
20 of at least a part of the support member, the carding machine further comprising a temperature-measuring device for measuring the temperature of at least one of the clothed roller and the cylinder, a gap-measuring device for measuring said working gap and a control device to  
25 which said thermal device, said temperature-measuring device and said gap-making device are connected to the

control device for effecting adjustment of the working gap in dependence on the measured gap.

21. A device on a carding machine for setting the working gap between the cylinder and at least one neighbouring roller, which cooperate with one another with a small gap between their cylindrical surfaces (working gap) at the fibre transfer points and in which the working gap is readjustable to pre-determined value as a result of changes in dimensions caused by thermal expansion and/or centrifugal forces, wherein the temperature of the framework walls carrying the cylinder can be so matched to the working gap by means of devices for supplying or discharging heat that in the event of a change in the dimensions of the rollers the working gap between the cylinder and at least one neighbouring roller can be set or readjusted.